

What is claimed is;

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Sub D1
1. A semiconductor laser comprising an active region which includes at least a quantum well layer and upper and lower optical waveguide layers and is of $\text{In}_x\text{Ga}_{1-x}\text{As}_y\text{P}_{1-y}$ ($0 \leq x \leq 1$, $0 \leq y \leq 1$) and upper and lower cladding layers formed of AlGaAs, wherein the improvement comprises that

at least one of the optical waveguide layers is not smaller than $0.25\mu\text{m}$ in thickness, and

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a part of the upper cladding layer on the upper optical waveguide layer is selectively removed up to the interface of the upper cladding layer and the upper optical waveguide layer.

Sub C1
2. A semiconductor laser as defined in Claim 1 in which the structure where a part of the upper cladding layer on the upper optical waveguide layer is selectively removed up to the interface of the upper cladding layer and the upper optical waveguide layer forms a ridge structure.

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3. A method of manufacturing a semiconductor laser defined in Claim 1 comprising the steps of

forming at least one of the optical waveguide layers in thickness not smaller than $0.25\mu\text{m}$,

Sub E1
forming the upper cladding layer of AlGaAs on the upper optical waveguide layer and

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selectively removing by etching a part of the upper cladding layer on the upper optical waveguide layer up to

the interface of the upper cladding layer and the upper optical waveguide layer.

Add
a5

Add
B1

Add
C3